

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 47

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KENICHI SATO, NOBUHIRO SHIBUTA, HIDEHITO MUKAI, TAKESHI
HIKATA, MUNETSUGU UEYAMA and TAKESHI KATO

Appeal No. 1999-0736
Application 08/167,581

HEARD: July 10, 2001

Before CALVERT, FRANKFORT, and BAHR, Administrative Patent
Judges.

CALVERT, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the examiner's refusal to allow claims 1, 3, 4, 6 to 8 and 10 to 12, all the claims remaining in the application.

The claims on appeal are drawn to a method of preparing a bismuth oxide superconducting wire, and are reproduced in Appendix A of appellants' brief.

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The references applied by the examiner are:

Arendt et al. (Arendt) (filed Apr. 2, 1990)	5,204,316	Apr. 20, 1993
Sato et al. (Sato '699) (effective filing date Dec. 6, 1990)	5,288,699	Feb. 22, 1994
Sato et al. (Sato '123)	5,610,123	Mar. 11, 1997

Claims 1, 3, 4, 6 to 8 and 10 to 12 stand rejected on the following grounds:

- (1) Unpatentable over Arendt in view of Sato '699, under 35 U.S.C. § 103(a);¹
- (2) Unpatentable for obviousness-type double patenting over claims 1 to 11 of Sato '123.²

On page 2 of their brief, appellants state that for purposes of the appeal, the claims are considered in one grouping. Therefore, pursuant to 37 CFR 1.192(c)(7), we select claim 1 and will decide the appeal based thereon.

¹A third reference, Meyer Pat. No. 5,206,211, was also applied in this rejection, but the examiner states on page 2 of the answer that the rejection based on Meyer is no longer maintained.

²This rejection is not repeated in the examiner's answer, but at the oral hearing counsel for appellants agreed that it should be considered as having been maintained by the examiner.

Rejection (1)

The basis of this rejection is set forth in detail on pages 3 to 7 of the examiner's answer, and it is unnecessary to repeat it here.

After fully considering the record in light of the arguments presented in appellants' brief and in the examiner's answer, we agree with the examiner that claim 1 is unpatentable over Arendt in view of Sato '699, and will therefore sustain the rejection as to all of the claims on appeal.

Appellants acknowledge at page 5 of their brief that Sato '699 discloses degassing, but argue that the combination of references would not have been obvious because Sato '699 does not teach degassing in order to improve bonding properties at the grain boundaries of the 2223 phases. This argument is not persuasive, because it is well settled that "[a]s long as some motivation or suggestion to combine the references is provided by the prior art taken as a whole, the law does not require that the references be combined for the reasons contemplated by the inventor." In re Beattie, 974 F.2d 1309, 1312, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992). Here, since Sato '699 discloses that degassing by heating under decompression is desirable to prevent inflation of the superconducting wire, which inflation causes

cracking and a reduction of critical current density (col. 3, lines 26 to 51), one of ordinary skill would have been motivated to include such a degassing step in the method of Arendt in order to gain the advantages taught by Sato '699. Since the modification of Arendt in view of Sato '699 would have been obvious for the purpose taught by the latter, the fact that Sato '699 may not teach that the bonding properties of the 2223 phases are improved thereby does not affect the viability of the combination. As stated in In re Baxter Travenol Labs., 952 F.2d 388, 392, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991), "[m]ere recognition of latent properties in the prior art does not render nonobvious an otherwise known invention." Moreover, as the examiner points out at pages 7 to 8 of the answer, part of appellants' disclosed purpose in degassing is to prevent swelling of the wire (specification, page 4, lines 24 to 33), which is the same purpose as taught by Sato '699.

Appellants further argue that, even if combined, Arendt and Sato '699 do not disclose preparation of a powder "of not more than 1 μ m in mean particle diameter," as recited in claim 1. The examiner recognizes that Arendt does not disclose this specific particle size. However, Arendt does disclose that in the prepared powder, the 2122 powder has an average particle size

"less than 2 microns, and the remaining reactants preferably have an average particle size ranging from submicron to 2 microns" (col. 6, lines 2 to 7). This disclosed range includes appellants' claimed range of 1 micron or less.

Where, as here, the difference between the claimed invention and the prior art is some range or other variable within the claims, "the applicant must show that the particular [claimed] range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range." In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990). On page 8 of their brief, appellants assert that "[t]he effect by [sic: of ?] the present invention is made by the synergistic function of the particle diameter and the degassing, and could not be expected by those skilled in the art even if all cited references were combined," and on pages 6 to 8 of their brief they describe experiments "[t]o prove the criticality of the claimed particle size." However, these statements in the brief are insufficient to constitute such evidence as would be required to establish criticality, since they were not submitted in the form of an affidavit or declaration under 37 CFR 1.132. In re Geisler, 116 F.3d 1465,

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1470-71, 43 USPQ2d 1362, 1365-66 (Fed. Cir. 1997); In re De Blauwe, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1994).³

We therefore conclude that the examiner has established a prima facie case of obviousness as to claim 1, which has not been rebutted by appellants.

Rejection (2)

As to this rejection, appellants state only that they will submit a terminal disclaimer "after the board decides the patentability of the subject claims" (brief, page 9). Since a terminal disclaimer has not been filed, the rejection has not been overcome, and therefore it will be summarily sustained.

Conclusion

The examiner's decision to reject claims 1, 3, 4, 6 to 8 and 10 to 12 under 35 U.S.C. § 103(a) and on the ground of obviousness-type double patenting is affirmed.

³We note moreover that an affidavit or declaration submitted for the first time with the brief would be considered only if the requirements of 37 CFR 1.195 were met.

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No time period for taking any subsequent action in
connection with this appeal may be extended under 37 CFR
§ 1.136(a).

AFFIRMED

IAN A. CALVERT)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
CHARLES E. FRANKFORT)	
Administrative Patent Judge)	APPEALS AND
)	
)	INTERFERENCES
)	
JENNIFER D. BAHR)	
Administrative Patent Judge)	

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